



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/657,404  
Source: Oipe  
Date Processed by STIC: 9-22-03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/657,404

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1        Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2        Invalid Line Length     The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3        Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
- 4        Non-ASCII     The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. Please **ensure your subsequent submission is saved in ASCII text**.
- 5        Variable Length     Sequence(s)        contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6        PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)       . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7        Skipped Sequences  
    (OLD RULES)     Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence:  
                          (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                          (i)     SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                          (xi)  SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                          This sequence is intentionally skipped  
  
                          Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8        Skipped Sequences  
    (NEW RULES)     Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence.  
                          <210> sequence id number  
                          <400> sequence id number  
                          000
- 9        Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                          Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                          In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10        Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
- 11        Use of <220>     Sequence(s)        missing the <220> "Feature" and associated numeric identifiers and responses.  
                          Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
                          (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12        PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13        Misuse of n/Xaa     "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid



OIPE

## RAW SEQUENCE LISTING

DATE: 09/22/2003

PATENT APPLICATION: US/10/657,404

TIME: 13:16:07

Input Set : A:\seq listing.txt

Output Set: N:\CRF4\09222003\J657404.raw

3 <110> APPLICANT: University of Strathclyde  
 4 Halbert, Gavin  
 5 Owens, Moira  
 6 Baillie, George  
 8 <120> TITLE OF INVENTION: Non-Naturally Occurring Lipoprotein Particle  
 10 <130> FILE REFERENCE: P07885US-CIP  
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/657,404  
 C--> 13 <141> CURRENT FILING DATE: 2003-09-08  
 15 <150> PRIOR APPLICATION NUMBER: PCT/GB97/02610  
 16 <151> PRIOR FILING DATE: 1997-09-25  
 18 <150> PRIOR APPLICATION NUMBER: GB 9620153.8  
 19 <151> PRIOR FILING DATE: 1996-09-27  
 21 <160> NUMBER OF SEQ ID NOS: 9  
 23 <170> SOFTWARE: PatentIn version 3.1  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 11  
 27 <212> TYPE: PRT  
 C--> 28 <213> ORGANISM: Artificial/Unknown *see item 10 on error summary report.*  
 30 <220> FEATURE:  
 31 <221> NAME/KEY: misc\_feature  
 32 <223> OTHER INFORMATION: Apo B binding site sequence  
 35 <400> SEQUENCE: 1  
 37 Lys Ala Glu Tyr Lys Lys Asn Lys His Arg His  
 38 1 5 10  
 41 <210> SEQ ID NO: 2  
 42 <211> LENGTH: 11  
 43 <212> TYPE: PRT  
 C--> 44 <213> ORGANISM: Artificial/Unknown  
 46 <220> FEATURE:  
 47 <221> NAME/KEY: misc\_feature  
 48 <223> OTHER INFORMATION: Apo B binding site sequence  
 51 <400> SEQUENCE: 2  
 53 Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys  
 54 1 5 10  
 57 <210> SEQ ID NO: 3  
 58 <211> LENGTH: 11  
 59 <212> TYPE: PRT  
 C--> 60 <213> ORGANISM: Artificial/Unknown  
 62 <220> FEATURE:  
 63 <221> NAME/KEY: misc\_feature  
 64 <223> OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site  
 67 <220> FEATURE:  
 68 <221> NAME/KEY: misc\_feature

**Does Not Comply  
Corrected Diskette Needed**

*see item 10 on error  
summary report.*

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/657,404

DATE: 09/22/2003

TIME: 13:16:07

Input Set : A:\seq\_listing.txt

Output Set: N:\CRF4\09222003\J657404.raw

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69 <223> OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
72 <220> FEATURE:
73 <221> NAME/KEY: misc_feature
74 <223> OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
77 <400> SEQUENCE: 3
79 Leu Arg Leu Thr Arg Lys Arg Gly Leu Lys Leu
80 1          5          10
83 <210> SEQ ID NO: 4
84 <211> LENGTH: 13
85 <212> TYPE: PRT
C--> 86 <213> ORGANISM: Artificial/Unknown
88 <220> FEATURE:
89 <221> NAME/KEY: misc_feature
90 <223> OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
93 <220> FEATURE:
94 <221> NAME/KEY: misc_feature
95 <223> OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
98 <400> SEQUENCE: 4
100 Gly Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys Leu
101 1          5          10
104 <210> SEQ ID NO: 5
105 <211> LENGTH: 22
106 <212> TYPE: PRT
C--> 107 <213> ORGANISM: Artificial/Unknown
109 <220> FEATURE:
110 <221> NAME/KEY: misc_feature
111 <223> OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <223> OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <223> OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
124 <400> SEQUENCE: 5
126 Tyr Lys Leu Gln Gly Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys
127 1          5          10          15
130 Leu Ala Thr Ala Leu Ser
131          20
134 <210> SEQ ID NO: 6
135 <211> LENGTH: 22
136 <212> TYPE: PRT
C--> 137 <213> ORGANISM: Artificial/Unknown
139 <220> FEATURE:
140 <221> NAME/KEY: misc_feature
141 <223> OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site
144 <220> FEATURE:
145 <221> NAME/KEY: misc_feature
146 <223> OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue
149 <400> SEQUENCE: 6

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/657,404

DATE: 09/22/2003

TIME: 13:16:07

Input Set : A:\seq listing.txt

Output Set: N:\CRF4\09222003\J657404.raw

151 Tyr Lys Leu Glu Gly Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys  
 152 1 5 10 15  
 155 Leu Ala Thr Ala Leu Ser  
 156 20  
 159 <210> SEQ ID NO: 7  
 160 <211> LENGTH: 22  
 161 <212> TYPE: PRT  
 C--> 162 <213> ORGANISM: Artificial/Unknown  
 164 <220> FEATURE:  
 165 <221> NAME/KEY: misc\_feature  
 166 <223> OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site  
 169 <220> FEATURE:  
 170 <221> NAME/KEY: misc\_feature  
 171 <223> OTHER INFORMATION: Retinoic acid linked at N-terminus of peptide analogue  
 174 <400> SEQUENCE: 7  
 176 Thr Gly Lys Arg Tyr Arg Leu Lys Thr Leu Arg Thr Leu Lys Lys Thr  
 177 1 5 10 15  
 180 Ser Leu Leu Glu Ala Ala  
 181 20  
 184 <210> SEQ ID NO: 8  
 185 <211> LENGTH: 9  
 186 <212> TYPE: PRT  
 187 <213> ORGANISM: Artificial Sequence  
 189 <220> FEATURE:  
 190 <223> OTHER INFORMATION: Apo B binding site sequence  
 192 <400> SEQUENCE: 8  
 194 Arg Leu Thr Arg Lys Arg Gly Leu Lys  
 195 1 5  
 198 <210> SEQ ID NO: 9  
 199 <211> LENGTH: 25  
 200 <212> TYPE: PRT  
 201 <213> ORGANISM: Artificial Sequence  
 203 <220> FEATURE:  
 204 <223> OTHER INFORMATION: Synthesised peptide analogue of the Apo B 100 binding site  
 206 <220> FEATURE:  
 207 <221> NAME/KEY: MISC\_FEATURE  
 208 <223> OTHER INFORMATION: Cholesterol linked at C-terminus of peptide analogue  
 211 <220> FEATURE:  
 212 <221> NAME/KEY: MISC\_FEATURE  
 213 <223> OTHER INFORMATION: Pyrene butyric acid linked at N-terminus of peptide analogue  
 216 <400> SEQUENCE: 9  
 218 Lys Leu Glu Gly Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys Leu  
 219 1 5 10 15  
 222 Ala Thr Ala Leu Ser Leu Phe Leu Phe  
 223 20 25

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/657,404

DATE: 09/22/2003

TIME: 13:16:08

Input Set : A:\seq listing.txt

Output Set: N:\CRF4\09222003\J657404.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:28 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1  
L:44 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2  
L:60 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3  
L:86 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4  
L:107 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5  
L:137 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6  
L:162 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7